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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,765	12/08/2003	Robert N. Petersen		6255

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EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,765	PETERSEN, ROBERT N.	
	Examiner	Art Unit	
	Joseph W. Drodge	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1203</u> . | 6) <input type="checkbox"/> Other: ____ |

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New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figures 1 and 2 should be labeled "Prior Art" since these only illustrate known features from Petersen patent 5,679,258. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, parts q, r, s, dd and ee contain clauses introduced by vague and indefinite terminology "if", "at any time... is, or has been", and "at any time... is at, or above", the same is true of dependent claims, including at least claims 7,9,14,16, etc.

In claim 6 scope of "being more or less vertical" is unclear.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen patent 5,679,258 in view of Anderson patent 4,521,312. Petersen discloses the limitations of claim 1, preamble, parts a, b, j, k, l, m, r, s, t, ff, gg and hh as explicitly claimed. Otherwise for claim 1, '312 discloses: for parts c through i, r and s, the vacuum tank containing at least 4 chambers including equalization and main gross chambers and heavy and light phase "sumps" as defined by partitions 28, 61, 37, 25A and 25B of figure 4, for parts n through q, there being overflow weir edges of partitions 37 and 62 (column 17, line 66 and column 18, lines 19-20), for parts w through y, outlets 26a, 53c, 26b and 53b (best shown in figure 3) with each of these outlets comprising conduits with flow control valves and pumps, controlled by controller 34, and for parts u, v and w, there being a plurality of level and interface sensors 43a, 43b, 43c and 44.

The claims differ from Petersen in requiring each of the heavy phase and light phase sump chambers to have an upper and lower surface level sensing means, which are operative to control the flow control means. The Petersen system is stated as suitable for separating plural, immiscible liquid fractions from diverse sources, including restaurants (column 2, lines 25-41). Andersen teaches a gravity separator for

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separating multiple immiscible liquid factions from sources such as food preparation areas (column 4, lines 60-65) in which upper and lower sections of the separation tank have respective upper and lower level sensing means 28,30,32,33,36,38,39 and 40 that actuate operation of flow control means 24,25 and 26 from different levels of the separation tank (see Abstract, etc.). It would have been obvious to one of ordinary skill in the art at the time of the invention, to have modified the Petersen system, by incorporating the sensor and flow control means arrangement of Andersen, in order to ensure withdrawal of relatively pure liquid phases from the separation tank.

Instant dependent claims 2-4, and 8-18 correspond to various dependent claims of the Petersen '258 patent.

With regard to claims 5-7, figure 4 illustrates the roof panel and connected vertical flow barrier wall 62 or 35, and anti-disturbance partition wall 37.

For claim 19, see column 16, lines 54-67 concerning vacuum control and purging means.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mains patent 6,444,119 and Burns patent 5,587,065 teach multi-chambered gravity separators for separating oil and water from sources such as bilge water, with outlet pumps or valves controlled by multiple level sensors.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

March 14, 2006


JOSEPH DRODGE
PRIMARY EXAMINER